CUSTOMER SUCCESS STORY

SOLVAY GROUP'S TRANSFORMATION AND ABILITY TO INNOVATE IS UNDERPINNED BY INFONET'S MANAGED IP VPN SERVICE

EXECUTIVE SUMMARY

CUSTOMER NAME

Solvay Group

INDUSTRY

Pharmaceuticals, chemicals, plastics

BUSINESS CHALLENGE

- Help enable business restructuring
- Support innovation

NETWORK SOLUTION

- Infonet Services Corporation's managed IP VPN service is delivered over an MPLS network built end to end with Cisco equipment and has a Cisco Powered Network designation
- The service supports Solvay's global ERP and intranet developments
- The managed network provides a flexible and secure foundation for new services, such as voice and video over IP

BUSINESS VALUE

- The managed IP VPN is proving to be an important factor in the company's own transformation, supporting a series of major restructuring programs

Solvay's adoption of a managed MPLS-based VPN service from Infonet Services, based on Cisco Systems® technology, is helping it to react quickly to new acquisitions and divestments, and to significantly reduce infrastructure maintenance costs.

BUSINESS CHALLENGE

Established in 1863, Solvay has evolved, through acquisitions and joint ventures, into an international group of companies that are leaders in the research, development, and manufacture of chemicals, pharmaceuticals, and plastics worldwide. With its headquarters in Brussels, Solvay operates more than 400 facilities in 50 countries. Every day, some 30,000 Solvay employees—2650 of them in research—strive to satisfy 160,000 customers. In 2003, the Solvay Group's consolidated sales were US$9.56 billion. Ninety-five percent of the Group's sales are generated outside Belgium, and 45 percent outside the European Union.

For the past four years, Solvay has focused on boosting its competitiveness and efficiency worldwide—a feat it has achieved by developing new pharmaceutical products, and sharing research and development costs with its partners. Each year, about 15 percent of total pharmaceutical sales are dedicated to researching new life-saving drugs. The expertise in the organization's pharmaceuticals businesses has been consolidated into one pharmaceuticals division so it can focus on four selected therapeutic fields—gastroenterology, gynecology/andrology, cardiology, and mental health.

Solvay's diversified chemicals business, which is currently spread over five continents and produces minerals, halogen, and oxygen products for many individual markets, is also being extensively restructured so it can produce more efficiently what local markets require. In June 2004, Solvay regrouped its plastics and processing operations into one plastics division that sells specialty polymers, fuel systems, vinyls, and derivatives so it could achieve economies of scale and direct more resources toward supporting its research and development efforts.

Since 2004, Solvay's four business units became three. The Group has set two primary objectives, which it hopes to achieve within three years:

- To obtain a fifth of its total revenue from products, markets, and applications created over the last five years
- To "innovate" by developing new products with its partners (customers and university research facilities) and explore new ways to recycle and promote sustainable development worldwide

The extensive restructuring required to achieve these goals, however, resulted in complex network configuration issues.

"Ours was a very diverse network that ran over several different technologies. Every time there was a change in the business, we had to reengineer the whole network. We thought there had to be a better way," says Robert Mead, global telecommunications officer for Solvay Information Services (SIS), which provides IT services to Solvay, its partners, and customers.

Other factors added to Solvay's network management complexities, including its desire to allow for new services in the future, the fact that its current networks would not easily provide the necessary capability and scalability, and its end users' increasing need for more bandwidth and interest in new network services, such as streaming media for training and staff communications.

NETWORK SOLUTION

In 1994, Solvay invested in a SAP solution to help improve operational efficiencies. After the initial ERP investment and a three-year implementation, Solvay felt it was doing an acceptable job of managing the environment by achieving 98 percent availability (excluding maintenance). Unscheduled outages, however, were painful and costly, leading Solvay to establish a new mandate to exceed 99 percent system availability, including scheduled maintenance. It also decided to outsource rather than make significant new investments in people and software.

Until 2002, Solvay's data and voice communications services (which ran over the company's global corporate network, SOLNET) were provided by many different service providers. However, this strategy gradually become untenable as Solvay evolved.

To address this challenge, Solvay decided to move away from a multivendor network toward a single, outsourced provider as a way of implementing and managing a global IT infrastructure. It also worked to keep its internal IT manpower at a reasonable level.

Solvay opened up a tender to six of the world's leading IT companies to help it select the best IP provider and to test the suitability of Multiprotocol Label Switching (MPLS)-based networks. In August 2002, Infonet Services Corporation participated in a six-month communications pilot with one other vendor. Superior flexibility and speed of response to Solvay's requirements ultimately made Infonet the best choice. Solvay believed that IP MPLS technology was sufficiently mature to be able to respond to its current and future global requirements. MPLS was seen as the foundation that would enable Solvay to move away from the previous multivendor network to a single global communications partner that could guarantee homogeneous service and provide IP convergence capabilities to multiple locations worldwide.

Infonet's IP VPN Secure product was selected because of its ability to deliver a flexible network that let Solvay focus its internal resources on running core business functions, such as SAP. Infonet also had a unique consultative approach, which helped cultivate a strong collaborative relationship between both organizations throughout the pilot process.

Between March and December 2003—just nine months—Infonet had migrated almost all Solvay sites from the old SOLNET network to the IP MPLS network, called the Flexible IP network or FLIPNET, within Solvay. There are currently 214 sites in 35 countries connected to FLIPNET.

Solvay has standardized globally on SAP and has begun to centralize business information in an intranet project called SOLIA in order to control and manage corporate data more efficiently. As well as SAP, Solvay's network is designed to run Structured Query Language (SQL) databases, Lotus Notes, and proprietary mainframe applications. The IP VPN supports a mixture of line-speed connections, from 128 kbps up to 8 Mbps.

"Infonet provides a quick response and has adapted to our needs extremely well," says Mead. "The FLIPNET implementation was done very quickly and almost flawlessly. Infonet's breadth of service offerings also provides us with local language and technical support. Except for the technical people involved, most users and management staff were either unaware that a change had taken place, or they were happy with the service improvement."

BUSINESS BENEFIT

Solvay is well-positioned to take advantage of converged IP communications across one unified network platform—helping it to becoming more efficient operationally and minimizing its costs in the process.

Mead says, “When we started working on the FLIPNET project, it was my intention to make sure that we had the best model of services possible, and then make them as cost effective as we could.”

The advantages Solvay enjoys as a result of selecting one rather than multiple providers include:

- One vendor for billing and maintenance worldwide
- Enhanced flexibility and scalability for adding new sites and providing new services to all sites easily and rapidly
- The integration of voice, video, and data over a single infrastructure, which reduces operating expenses and supports the addition of new IP applications in the future
- End-to-end service levels, achieved by implementing multiple classes of service (CoSs), that deliver improved performance for critical business applications

“Infonet’s IP VPN service allows our internal people to focus on other business critical requirements,” says Mead, who has calculated that the new infrastructure is 24 percent less expensive to run globally than the previous one. This is a result of using the accumulating costs (pre-FLIPNET) for all the many WAN links to negotiate a global contract with one vendor.

“We were looking for an overall savings from the move from a decentralized situation, with hardware owned and maintained by the regions and sites, to a full-service solution from Infonet,” says Mead.

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Robert Mead
Global Telecommunications Officer
Solvay Information Services

INFONET SERVICES’ IP VISION

Solvay is one of some 3000 multinational corporations that Infonet Services Corporation serves. The service provider targets multinationals in the pharmaceuticals, chemicals, manufacturing, logistics, and financial services industries, which are increasingly coming under pressure to run their global applications more efficiently and cost effectively. Infonet is recognized globally for the quality of its customer service, as numerous awards testify.

Infonet’s IP VPN Secure product, which runs over Infonet’s private IP infrastructure (the Infonet World Network), is based on Cisco MPLS technology that offers five or more CoSs. Infonet’s IP VPN solutions include both private and public IP services, as well as a full set of managed security and mobility services.

According to Infonet’s vice president of Network Service Marketing, Jean-Noel Moneton, in the past three years, multinationals have expressed a great deal of interest in implementing IP VPN to support critical business applications. “We receive requests, almost exclusively now, for MPLS-based IP VPNs,” he says.

Infonet launched its first IP VPN in June 1991 using access control lists (ACLs) an early method of controlling IP traffic over a network—and became one of the first members of the Cisco® Powered Network Program in 1995. Infonet’s relationship with Cisco Systems began in 1991 when it chose to work with Cisco because it wanted to be well-positioned for the longer term. “And we have been proven right,” says Moneton.

"Cisco has worked very closely with our engineering team. This has allowed us to deliver our services faster than if we had to do it by ourselves. The Cisco Powered Network designation has also helped in the marketplace because it's recognized as a label of quality."

Infonet has continued innovating with IP through the global economic downturn, which has shown a slowdown in telecommunications spending (by customers) and a struggle to protect margins. Infonet responded by assembling a suite of IP-oriented products, including:

- Single-class MPLS in October 2001
- Inter-Provider-capable MPLS with a global CoS in January 2002
- CoSs in August 2002
- Converging products with managed IP voice VPN in October 2002
- IP video VPN, another managed service, in 2004

This has proved to be a successful strategy, with Infonet maintaining a strong, debt-free balance sheet, while keeping costs under control as its core network services revenue grew 12 percent in 2004. The company is predicting an additional 10 percent growth in 2005.

"A significant number of our clients have already migrated from traditional TDM voice and ISDN video to IP-based voice and video services," says Moneton. "This represents the beginning of what we expect to be a steady growth curve through the next few years."

According to Moneton, with IP increasingly receiving the majority of the traffic, it is more efficient to employ an MPLS, rather than an ATM, core. "It also gives us more flexibility to introduce new services," he says, "and if we can offer all protocols over one type of network and one edge device, that represents significant capital and operating expense savings."

INFONET'S NETWORK

Infonet's own backbone network currently has 140 points of presence (POPs). Its worldwide network is accessible from more than 180 countries, and local service support is provided to more than 70 countries and territories. The company has taken a major step forward by retooling its network with Cisco 7613 and 7513 routers for its optical IP network, and Cisco 7500 and 7200 series routers at the edge. Its customer premises equipment (CPE) consists of Cisco 1700, 2600, 3600, and 3700 series routers.

Infonet also worked closely with Cisco to establish CoSs. "At the beginning we introduced four classes of service, but soon realized that we couldn't run voice and video efficiently over the same class of service, so we increased to five," says Moneton. "We have engineered each voice, video, and data class separately. MPLS and its inherent classes of service capabilities enables Infonet to offer tiered options VPNs, with different prioritizations, and this makes convergence of data, voice, and video on one network a reality. Without this prioritization, convergence would remain a myth."

Since Infonet has offered IP VPN CoSs, customer numbers and revenue have grown significantly. During the past two years, growth has increased by more than 50 percent. The company's monthly IP revenue equaled that generated by its Frame Relay business by the middle of its 2004 fiscal year.

HELPING TO ASSURE SUCCESS

Infonet has always believed that the network exists to support an enterprise's WAN-based applications. The company first assesses a client from an application perspective, and not just from a network standpoint. This client application-oriented approach to networking is one that is highly valued by its customers.

Infonet's Application-Defined Networking methodology models how an application behaves over the WAN. For example, says Moneton: "It's not always obvious that the most critical application has to go in the highest priority class of service, because it's more a question of time sensitivity, than one of simple business criticality."

While Solvay's proprietary ERP system was important, it was less time-sensitive than its trading application. Understanding this, Infonet recommended that the highest priority be given to the trading application. "The company observed a fairly significant improvement in its trading application, which translated immediately into money saved," says Moneton.

Infonet's view of convergence also doesn't stop at the convergence of applications with voice, data, and video. It also incorporates the convergence of infrastructure between the public Internet and private IP. Many Infonet clients are currently considering establishing private IP networks, in addition to using the Internet, wanting the two to converge. Using MPLS over its Internet backbone, Infonet helps enable this convergence by providing transparent VPN connectivity between its Internet and private IP network.

NEXT STEPS

With the new MPLS network in place, Solvay is well-positioned to enjoy converged IP communications across one unified network platform, gaining both operational and cost-saving advantages in the process.

Along with the changes to the business, there are increasing demands from users for Internet services. "Now we have the infrastructure to provide them with all the value-added services they need," says Mead.

Voice over IP (VoIP) telephony will be available on FLIPNET in early 2005, and Solvay is also trialing videoconferencing over IP. Mead maintains that if the results of the video pilot show a good return on investment (ROI), videoconferencing over IP will also be available over FLIPNET.

FOR MORE INFORMATION

For more information about managed services, including managed IP VPN, Metro Ethernet, managed voice, and managed network security solutions, please visit: http://www.cisco.com/go/managedservices.

An interactive e-tour is also available at: http://www.cisco.com/go/msetour.

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